

## Fire Rated SMA Male to TNC Male Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components

### PE3C10405

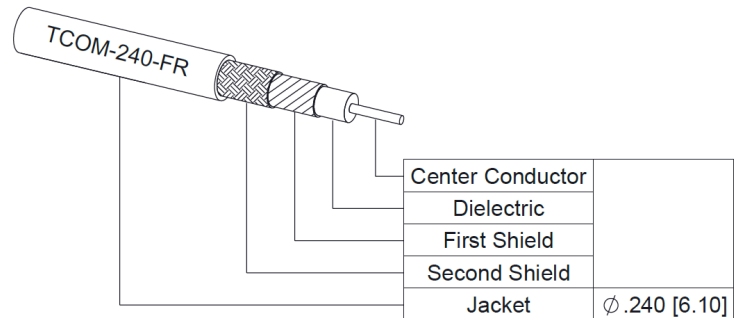


#### Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: TCOM-240-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C10405 SMA male to TNC male cable using TCOM-240-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240-FR coax. The PE3C10405 SMA male to TNC male cable assembly operates to 6 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	100			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.06 [6.76]		Ohms/1000ft [Ohms/Km]

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3C10405	Custom Lengths Available	Insertion Loss (Typ.)	0.037	0.052	0.076	0.123	0.197	dB/ft	
			0.13	0.18	0.25	0.41	0.65	dB/m	
PE3C10405-12	12 inch	Insertion Loss (Typ.)	0.44	0.46	0.48	0.53	0.6	dB	0.117
PE3C10405-24	24 inch	Insertion Loss (Typ.)	0.48	0.51	0.56	0.65	0.8	dB	0.162
PE3C10405-36	36 inch	Insertion Loss (Typ.)	0.52	0.56	0.63	0.77	1	dB	0.207
PE3C10405-48	48 inch	Insertion Loss (Typ.)	0.55	0.61	0.71	0.9	1.19	dB	0.252
PE3C10405-60	60 inch	Insertion Loss (Typ.)	0.59	0.66	0.78	1.02	1.39	dB	0.297

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.3 dB
Base Weight:	0.117 pounds
Additional Weight per Inch:	0.00375 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.117 lbs [53.07 g]

##### Cable

Cable Type	TCOM-240-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	50 µinch
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	
Body Material and Plating	Passivated Stainless Steel, Gold	Brass, Tri-Metal
Body Plating Specification	SAE-AMS-2700	80 µinch
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Plating Specification	SAE-AMS-2700	80 µinch
Torque		8 in-lbs 0.9 Nm

#### Environmental Specifications

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

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### PE3C10405

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10405**

**- xx**

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Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C10405-12 = 12 inches long cable  
PE3C10405-100cm = 100 cm long cable

Fire Rated SMA Male to TNC Male Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to TNC Male Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10405](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-tnc-male-low-loss-cable-using-tcom-240-fr-pe3c10405-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C10405 CAD Drawing

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